

**Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal**

Section 1. General administrative information

**The Shoshone-Bannock Critical Ecosystem
Reclamation, Recovery and Recharge Project
(Ecosystem Project).**

Bonneville project number, if an ongoing project 9042

Business name of agency, institution or organization requesting funding
The Shoshone-Bannock Tribes

Business acronym (if appropriate) _____

Proposal contact person or principal investigator:

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Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name

NPPC Program Measure Number(s) which this project addresses.

11.2D.1, 7.6C.1, 7.6C.5, 7.6D, 7.8H,

NMFS Biological Opinion Number(s) which this project addresses.

Other planning document references.

Subbasin.

Upper Snake River Subbasin

Short description.

Utilizing the youth of the Tribe, improve ongoing environmental problems in the upper Mount Putnam drainage basin through active restoration of terrestrial and aquatic systems.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
	Anadromous fish		Construction		Watershed
	Resident fish		O & M		Biodiversity/genetics
*	Wildlife		Production		Population dynamics
	Oceans/estuaries	*	Research	*	Ecosystems
	Climate		Monitoring/eval.	*	Flow/survival
	Other	*	Resource mgmt		Fish disease
			Planning/admin.		Supplementation
			Enforcement	X	Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords.

Recharge, Recovery, Reintroduction, Riparian, Education, Tribal, Drainage Basin, Headwater Streams, Mine Drainage, Environmental Corps, Salmon Corps

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Renovation of building for Environmental Center to house	a	Planning and design of renovation.

	operations of EnviroCorps.	b	Renovation
2	Development of EnviroCorps	a	Develop curriculum for EnviroCorps.
		b	Initiate training of EnviroCorps staff.
		c	Train EnviroCorps members in necessary KSA=s.
3	Environmental Assessment	a	Conduct Environmental Assessment for Ecosystem Project
		b	Scope project.
4	Begin EnviroCorps Pollution Prevention Program	a	Educate public as to goals of the EnviroCorps and the Ecosystem Project through EcoNews.
5	Begin EnviroCorps Field Work	a	Begin EnviroCorp work on Ecosystem Project.
6	Monitor and disseminate results	a	Publish results through EnviroCorps AEcoNews=.
7	Award scholarships	a	EnviroCorps Members receive scholarships.
8	Begin FY2000 cycle	a	Planning for FY2000 according to adaptive management.

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	01/99	03/99	10%
2	01/99	03/99	2.5%
3	01/99	06/99	5%
4	05/99	12/03	5%
5	05/99	12/03	60%
6	05/99	12/03	5%
7	08/99	08/03	10%
8	12/99	12/03	2.5%

Schedule constraints.

None anticipated.

Completion date.
2003

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel	Coordinator 1000 hours @ 14.50 hour	14,500
	10 Temporary Part-time employees (10 X 500 hours @ 8.00/hour)	40,000
Fringe benefits	Total for Coordinator and 10 Temporary Part-time employees.	15,550
Supplies, materials, non-expendable property	Safety equipment, fencing, hand tools, waders, animal traps, plantings, etc.	20,000
Operations & maintenance	For Environmental Center, EnviroCorp and project vehicles.	15,000
Capital acquisitions or improvements (e.g. land, buildings, major equipment.	Reclamation work to headwater streams, springs and phosphate mine drainages requiring heavy equipment, etc..	50,000
	Gentrification of abandoned building for Environmental Center on Fort Hall campus.	25,000
	Vehicles: 1998 Dodge Ram Pickup	28,000
	Used 18 Passenger Van	15,000
PIT tags	# of tags: NA	
Travel	Regular travel to and from site and project associated travel @ \$.31/mile approximately 10,000 miles/year with personal vehicles.	3,100

Indirect costs	28.5% of Total Salary and Fringe	17,410
Subcontracts		
Other	Consulting fees for macroinvertebrate toxicity, bioaccumulation and fish/beaver suitability studies.	3,000
	Grants to High School students to be used for college or technical education upon completion of service to Environmental Corps. 20 Grants @ 1000 each.	20,000
TOTAL		266,560.

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	175560	175560	175560	175560
O&M as % of total	8%	8%	8%	8%

Section 6. Abstract

The goal of the Shoshone-Bannock Critical Ecosystem Reclamation, Recovery and Recharge Project is to restore the upper Mount Putnam drainage basin while empowering future Tribal leaders through a new program called EnviroCorps. Overgrazing, mining and off road vehicle usages have degraded this systems ability to support wildlife crucial to Indian ways. Through a series of phases, the EnviroCorps will reclaim and restore critical riparian areas, re-establish self-sustaining fish populations and re-introduce beaver populations (and impoundments) to recharge the ground water in the Mount Putnam area. While accomplishing the goals of this project, the young people will gain experiences/knowledge which aid in life direction, self-esteem and spiritual fulfillment. This approach to educating youth, while solving environmental problems, is a proven success in Salmon Corps.

This project will involve four phases. Phase one includes conducting an EA, soliciting the educating the Tribal membership and developing the EnviroCorps program. The main components of phase one should be accomplished by the end of FY99. The second phase, restores the lowest order streams and springs of the basin on a priority basis. Phase three focuses on the riparian areas of the higher order streams. Phases two and three will be ongoing in nature, completion dates will vary. Priority phase two projects should be near completion by FY2000; priority phase three projects by FY2003. Phase four will establish a monitoring/maintenance program. EnviroCorp will assume these tasks under the direction of the Environmental Program. Project accomplishments and results will be reported in EcoNews.

Section 7. Project description

a. Technical and/or scientific background.

The Mount Putnam area is a region of very special concern to the Shoshone-Bannock Tribes; it is a sacred place and a key drainage basin in the Upper Snake River Subbasin. Years of abuse, coupled with decreased flows and fish runs in the Snake River has left this area depleted. Not just depleted of salmon or steelhead, but also depleted in a cultural sense. Perpetuation of traditional Indian ways/culture relies heavily on a balance in the natural world. That balance is gone in the Mount Putnam drainage basin. Through EnviroCorps reclamation of habitat, recharge of the systems springs and streams (and subterranean) and mediation of mine drainage, environmental conditions will be improved to ensure sufficient water quality for native fishes. Improving riparian vegetation will decrease cattle grazing impacts and improve critical winter range for elk, deer and other wildlife. This project will in the long term protect and enhance the ecosystem and its species diversity.

b. Proposal objectives.

Objectives (#) and Outcomes (*)

- 1 Renovation of building to house EnviroCorps (Environmental Center).
2. Create a viable organization called EnviroCorps.
 - *Invest in our childrens education and the future of our Tribe.
 - *Initiate EcoNews, a new environmental newsletter to disseminate crucial knowledge
 - *Pollution Prevention
3. Environmental Assesment
 - *Conduct EA under Shoshone-Bannock tribes guidelines.
4. Improve environmental conditions in the Mount Putnam Drainage Basin.
 - *Mediate mine drainage, overgrazing
 - *Restore native fish, wildlife and cultural resources.
- 5 . Install a self perpetuating monitoring program to ensure continued watchdoging of the Mount Putnam Drainage by EnviroCorps.
 - *After conditions are restored in the project area, EnviroCorp will continue for purposes of monitoring the area, continued maintenance and education; a living classroom.
 - *EcoNews will continue to maintain public awareness of key issues/concerns for Tribal Members.

c. Rationale and significance to Regional Programs.

The loss of critical wildlife habitat to the mining of phosphate, overgrazing as well as the reduction of flows in the Snake River have made necessary the use of Incubators by Salmon Corps to reclaim our populations of native fish. Although this is method has

proven to be a major success, it is currently lacking the key component of habitat restoration. By creating a unique partnership with the public school system EnviroCorps will reduce costs, increase the benefits of the incubator program directed by Salmon Corps and improve not only our environment, but our future leaders. This program should prove to be the least-costly alternative in restoring the Mount Putnam system.

d. Project history

This is a new Program.

e. Methods.

Methods

1. Renovation of building to house EnviroCorps (Environmental Center).

This objective will be conducted in two phases. The first is planning and design of the renovation according to project needs, present and future. The second is the actual renovation which will be conducted by the Tribes Maintenance staff. No problems are anticipated in meeting this objective. As with all renovations there will be unique circumstances which will require adaptations to the plans once work is begun. Precise methodologies will need to be developed in conjunction with the various concerned Tribal entities.

2. Development of EnviroCorps.

This process will involve curriculum development through coordinated efforts of the Environmental program and the school system. EnviroCorps development will need to encompass an oversight committee to judge such things as scholarship awards, appointment to paid positions and discipline. Precise methodologies will need to be developed in conjunction with the various concerned Tribal entities. The Pollution Prevention will be largely steered by the members of EnviroCorp. The plan being to give the children direction in the development of the environmental news letter EcoNews and than let them evolve this concept into a viable product. This news letter will be the main vector of dissemination of information to the public about the project.

3&4. Environmental Assesment and field work.

An environmental Assesment will be conducted for the field work aspect of the project and will follow the Shoshone-Bannock Environmental Assesment criteria. This Assesment will cover remediation work on a programmatic basis and will encompass all necessary elements. This Environmental Assesment will, upon completion, be appropriately scoped and revised to ensure adequate measures are taken for any special animal care, environmental protection, risks to habitats, other organisms, or humans requirements/needs.

The actual remediation/reclamation/recovery efforts will be done on a priority basis according to a schedule of lowest order waters first, highest order last. The precise methodology will be spelled out in the environmental Assesment. Until the EA is

conducted, exact methodologies will be impossible to enumerate. However, it is safe to say that these efforts will involve fencing of riparian areas, plantings of native species (and only natives), rip-rap, transplanting of beavers, (to recharge waters through natural impoundments) and the use of heavy equipment to remediate mine drainage.

5. Methods for monitoring/evaluating results and the kinds of results expected. It is anticipated that this project will be very successful in improving environmental awareness and knowledge among the Tribal membership. By utilizing the efforts of the youth, access is gained to the households of the reservation and hopefully to the support of the older generations. Our Tribal membership is very vocal and through the mechanism of EcoNews we will solicit the memberships comments and criticisms. In the field we will be able to compare treated areas to untreated ones to determine success. If our project works like other similar efforts (ie. Americorps, Salmon Corps) than success will be self-evident.

Possible limiting Factors

The number one limiting factor for this project is Money. Without funding there is little hope for improving the environmental health and consciousness of the Fort Hall Indian Reservation. Weather is another possible limiting factor. Creative scheduling should ease problems associated with inclement weather.

f. Facilities and equipment.

1. Building to house EnviroCorp (Environmental Center)
 - *Exists, is owned by the tribes but is in need of renovation.
 - *Significant cost savings compared to construction of new facility of its kind.
2. Field Equipment
 - *As this is a new program, shovels, waders, safety equipment, etc. will need to be purchased.
3. Vehicles
 - *No Tribal vehicles are available/suitable for the purposes of this project and must be purchased for material and laborer transport
4. Materials
 - *Fencing, plantings and other materials do not exist and will need to be purchased.

g. References.

Section 8. Relationships to other projects

As previously mentioned this project will complement the efforts of the Salmon Corps

program. This project will not conflict any other known project.

Section 9. Key personnel

This project will be overseen by the Shoshone-Bannock Tribes Environmental Program and its Coordinator, James Reed. The Coordinator position is a full time 40hours/week position.

James Michael Reed

Education

Master of Science, Environmental Biology. Hood College. 1997

Bachelor of Science, Environmental Science. Slippery Rock University. 1992

Associate in Arts, Park and Wildlife Management. Frederick Community College. 1990

Current Employer

The Shoshone-Bannock Tribes

Current Responsibilities

Coordinator of the Shoshone-Bannock Tribes Environmental Program. Oversee program and related projects such as Forestry and the Ethnographic Plant program.

Previous Work Experience

Adjunct Faculty Member, Frederick Community College. Frederick, MD.

Teaching Assistant, Frederick Community College. Frederick, MD.

Production Assistant, Hunting Creek Fisheries. Thurmont, MD.

Timber Rattlesnake Den Colony Survey, Maryland Department of Natural Resources.

Rave Banding, Maryland Department of Natural Resources.

Search and Rescue Team, Yosemite National Park, Yosemite, CA.

Area of Expertise

Education is a particularly strong point and integrated throughout mosts of my current duties with the Shoshone-Bannock Tribes. As a past faculty member of a college, an aquatic ecologist by formal training and an avid outdoors person (hiked the Appalachian trail from Maine to Georgia, Search and Rescue in Yosemite, etc.) I understand how vital it is to evoke positive change in young people at an early age. Of particular strength is my ability to motivate young people intellectually and in outdoor activities.

Recent Publications

Reed, J. M. 1989. Fire Protection Plan for Washington Monument State Park. Report to the state of Maryland, Department of Natural Resources, Washington Monument State Park.

Reed, J. M. 1993 Protocol for outdoor recreation instruction. Curriculum for Frederick Community College.

Manuscripts in Preparation

Reed, J. M. And R. P. Creed Jr. The effects of the crayfish *Cambarus bartoni* on a headwater stream community (in preparation for Ecology).

Reed, J. M. 1996 Common saint Johnswort (*Hypericum perforatum*) in: R. Creed (ed) Problem exotic plant species in Catoctin Mountain National Park.

Reed, J. M. The Appalachian Trail as a corridor for biodiversity. (In preparation for the Appalachian Trail Conference).

Section 10. Information/technology transfer

This project will be heavily addressed in EcoNews, a new Tribal environmental news letter to be created by EnviroCorps. The public will be kept up-to-date as to EnviroCorps progress in the project. This news letter will be available to anyone who is interested in receiving it.